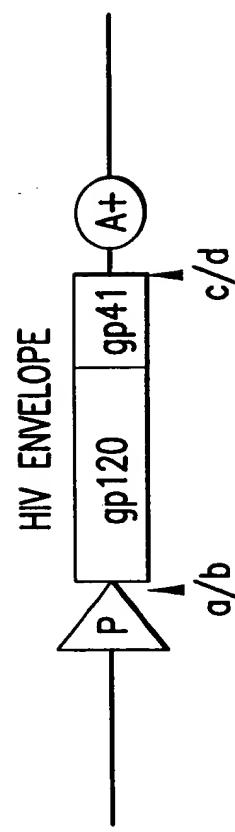


PHENOSENSE HIV ENTRY ASSAY

ENVELOPE EXPRESSION VECTOR: pHIVenv



HIV-1 EXPRESSION VECTOR: pHIVlucΔU3

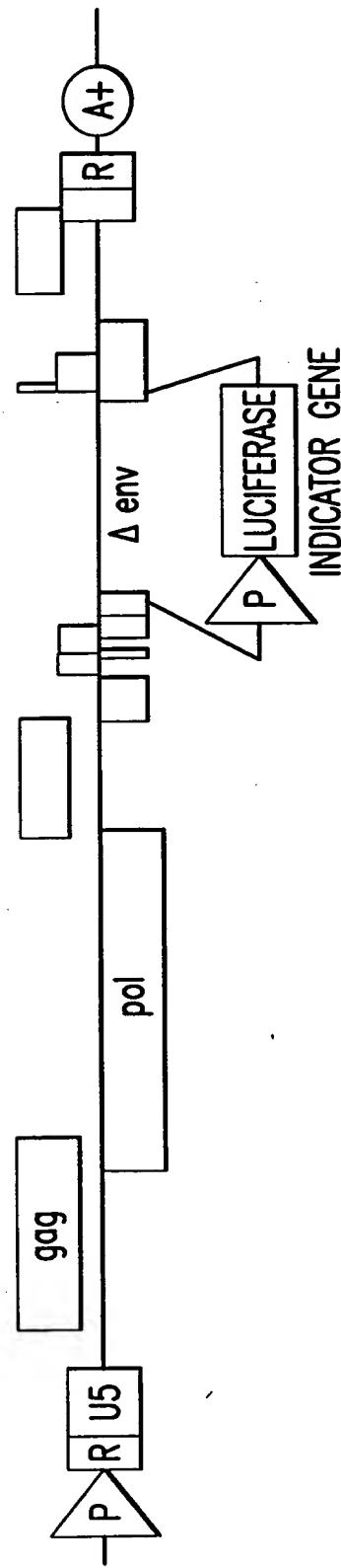
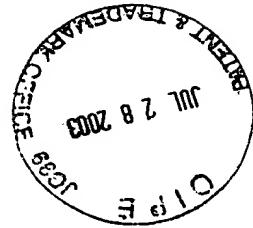


FIG. 1A



PHENOSENSE™ HIV: CELL ASSAY

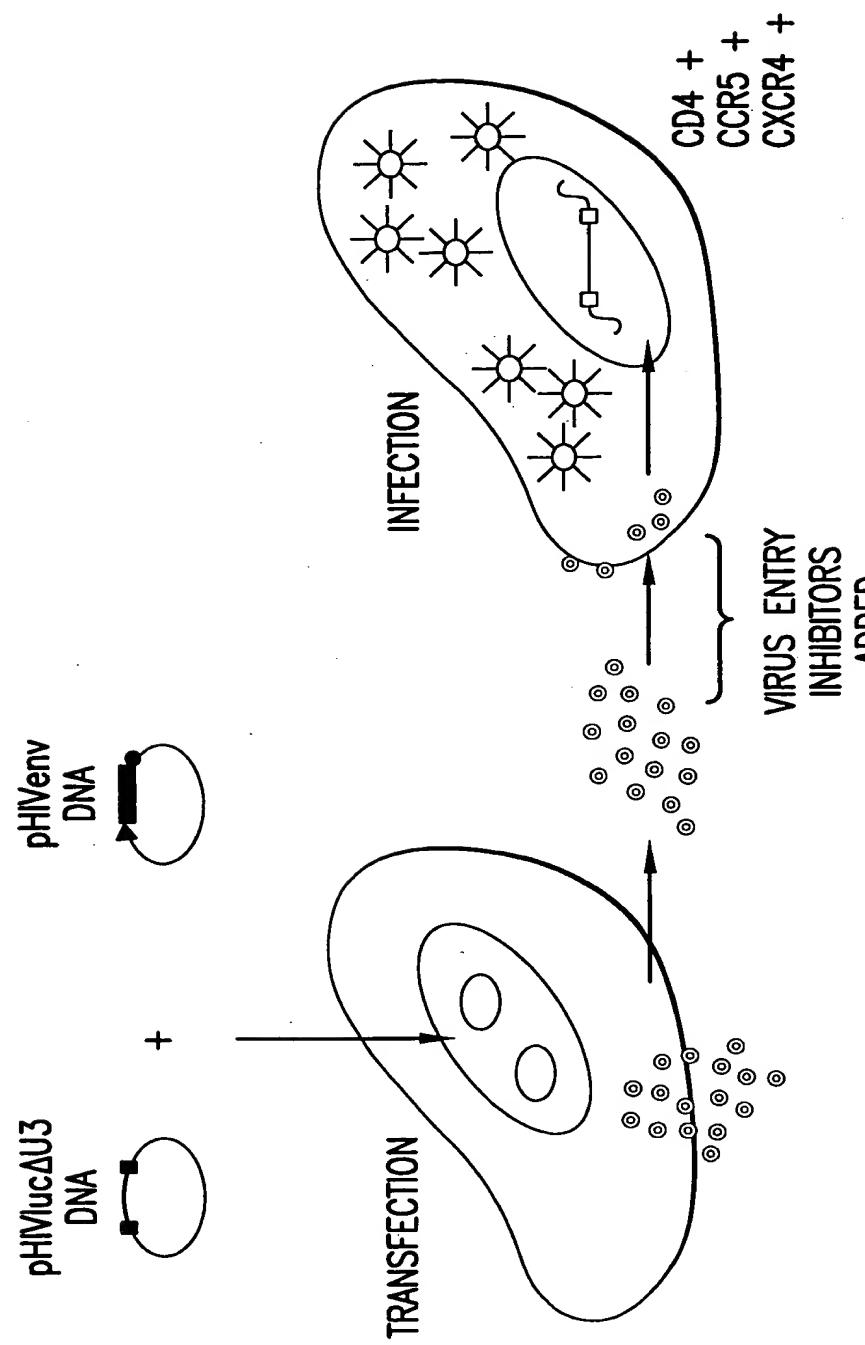
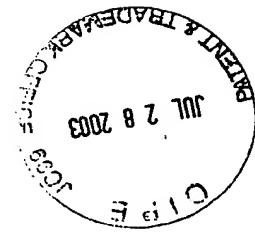


FIG. 1B



## HIV ENVELOPE EXPRESSION STRATEGIES

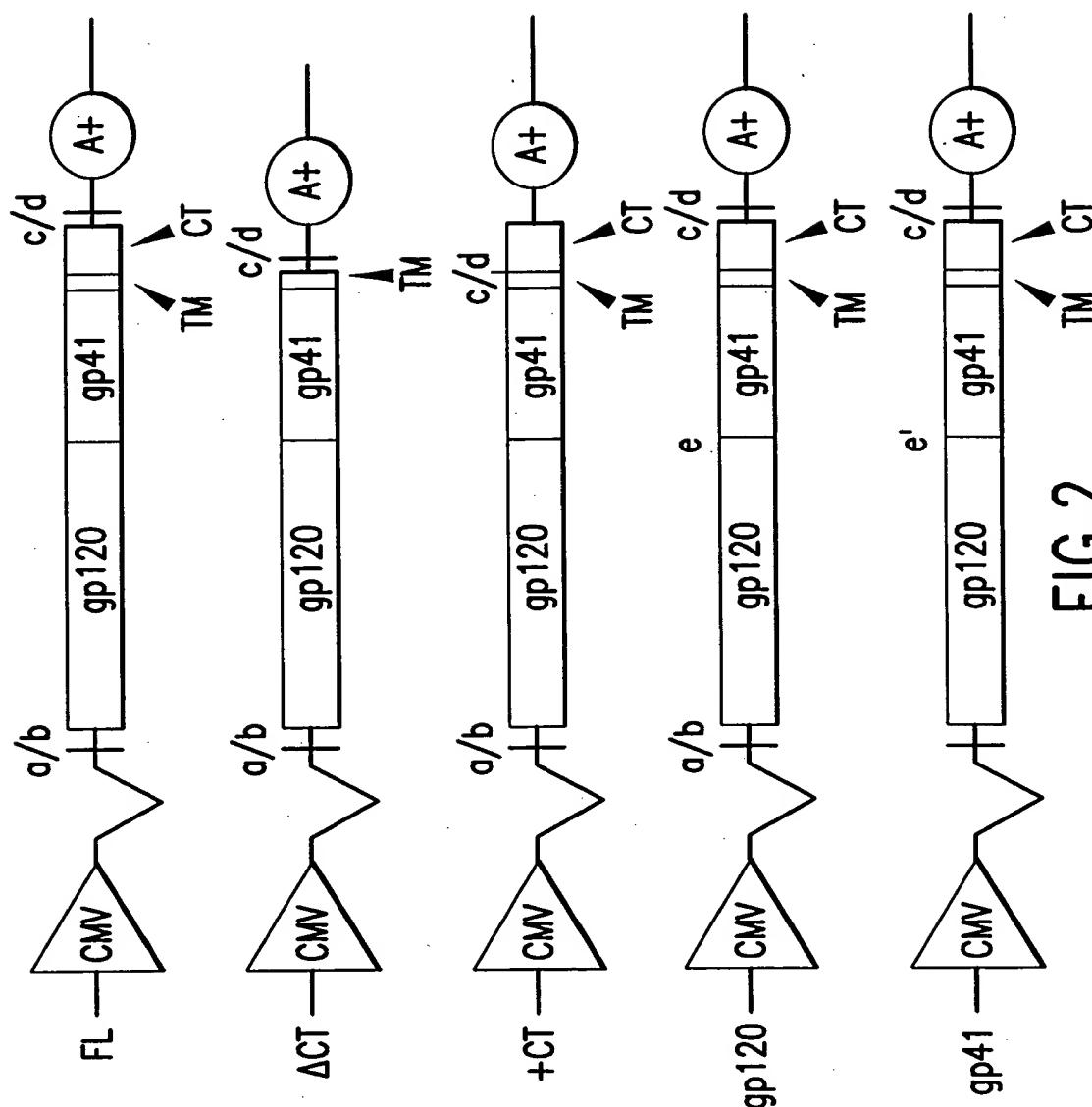


FIG. 2



CO-RECEPTOR TROPISM SCREEN  
CCR5-EXPRESSING CELLS

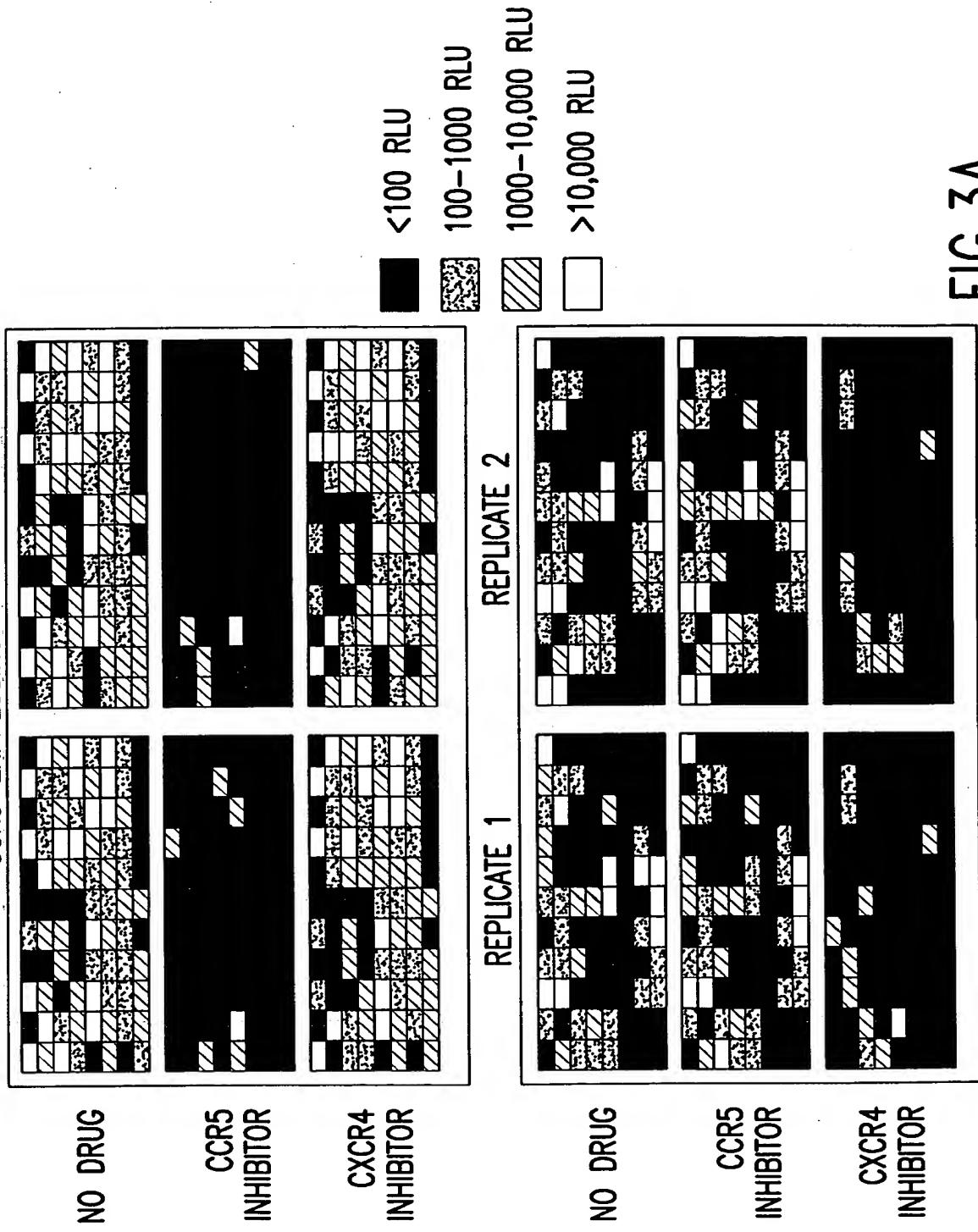


FIG. 3A

CXCR4-EXPRESSING CELLS



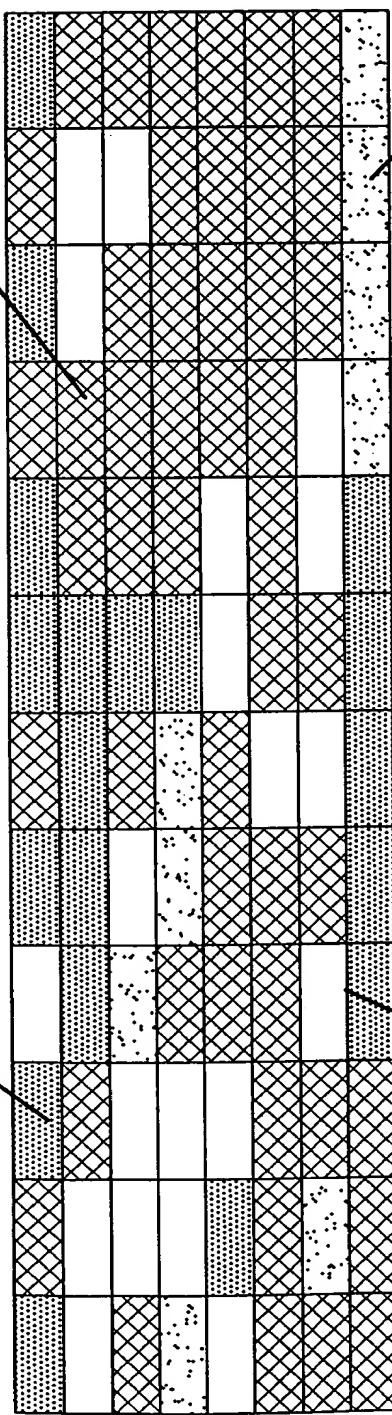
CO-RECEPTOR TROPISM ASSAY INTERPRETATION

3

21

	R5 CELLS	X4 CELLS	R5X4
NO DRUG	34	26,471	0
R5 INHIBITOR	19,258	32	
X4 INHIBITOR		27	
% INHIB BY R5 INHIBITOR		100	
% INHIB BY X4 INHIBITOR			

	R5	X4	R5X4
NO DRUG	67,389	72	936
R5 INHIBITOR	99		
X4 INHIBITOR	42,295		
% INHIB BY R5 INHIBITOR	100		
% INHIB BY X4 INHIBITOR	37		

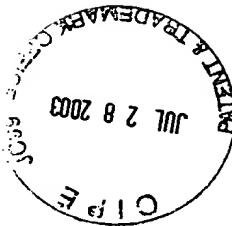


ACTIVE RLU LIMIT: 100  
TROPISM RATIO LIMIT: 5

CXCR4  
CCR5  
DUAL OR MIXED  
NON-VIABLE

	R5	X4	R5X4
NO DRUG	43		72
R5 INHIBITOR			
X4 INHIBITOR			
% INHIB BY R5 INHIBITOR			
% INHIB BY X4 INHIBITOR			

FIG. 3B



# ENTRY INHIBITOR SUSCEPTIBILITY: FUSION INHIBITOR

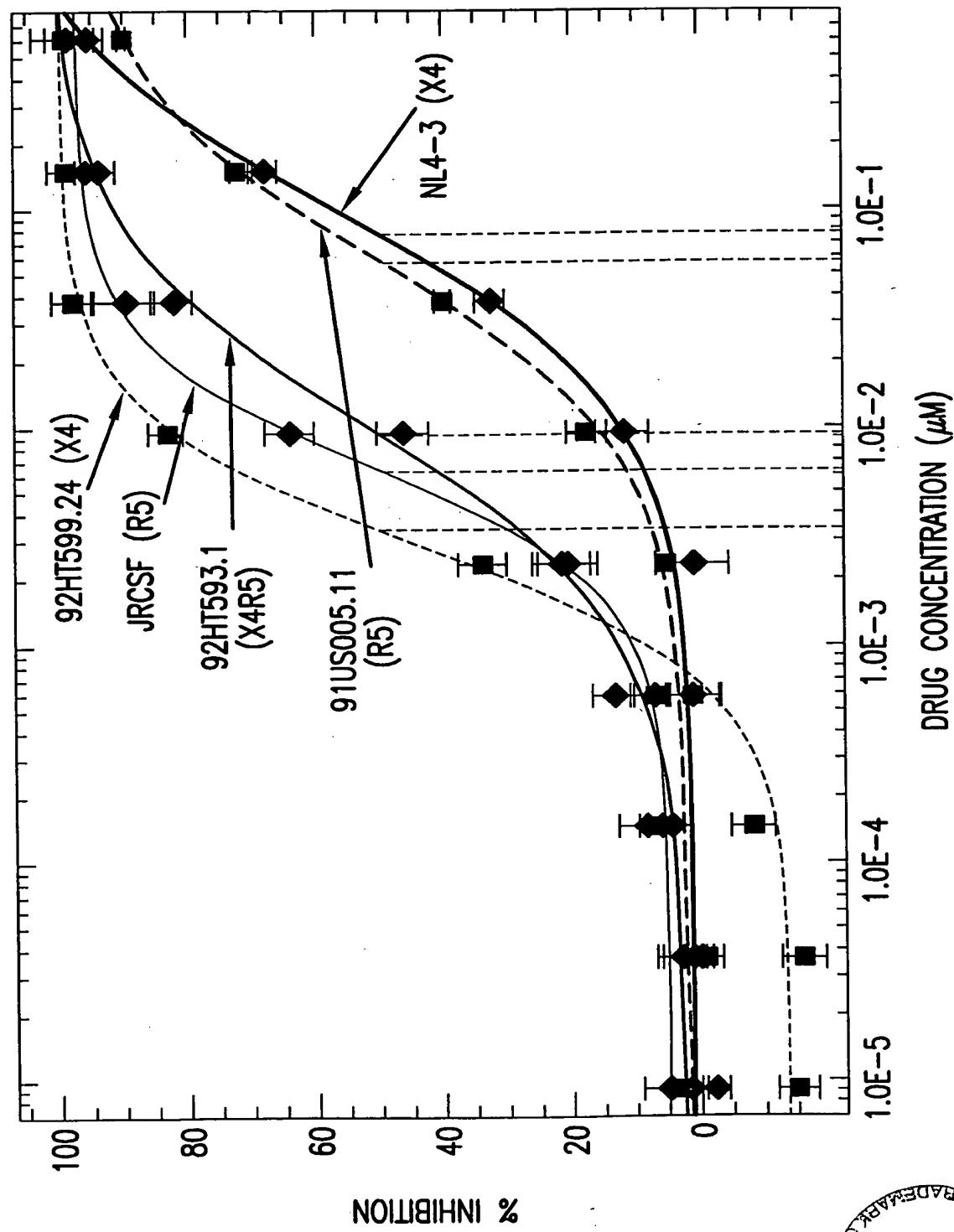
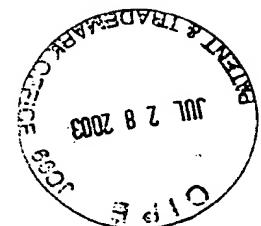


FIG. 4A



## REDUCED SUSCEPTIBILITY: FUSION INHIBITOR

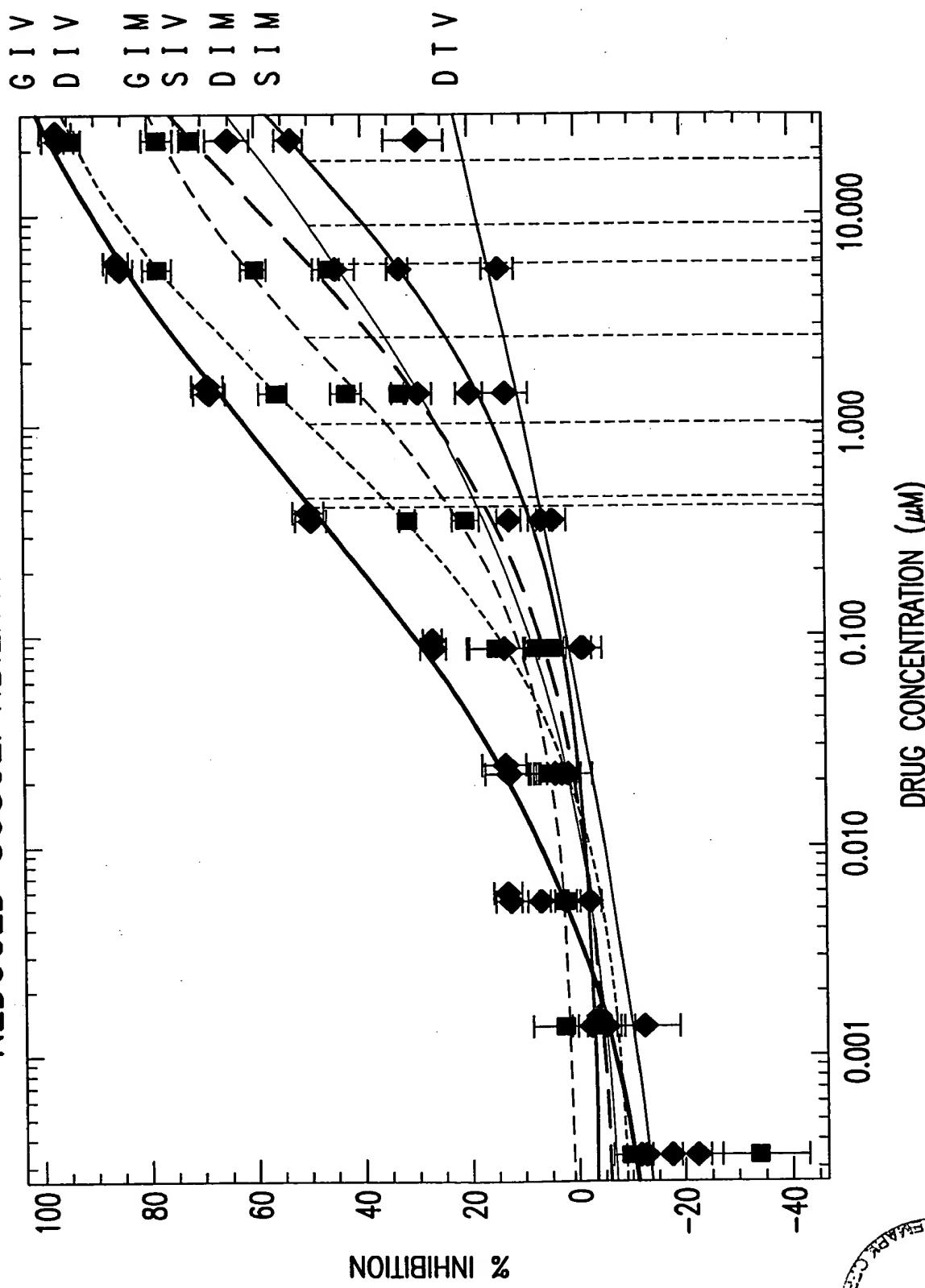
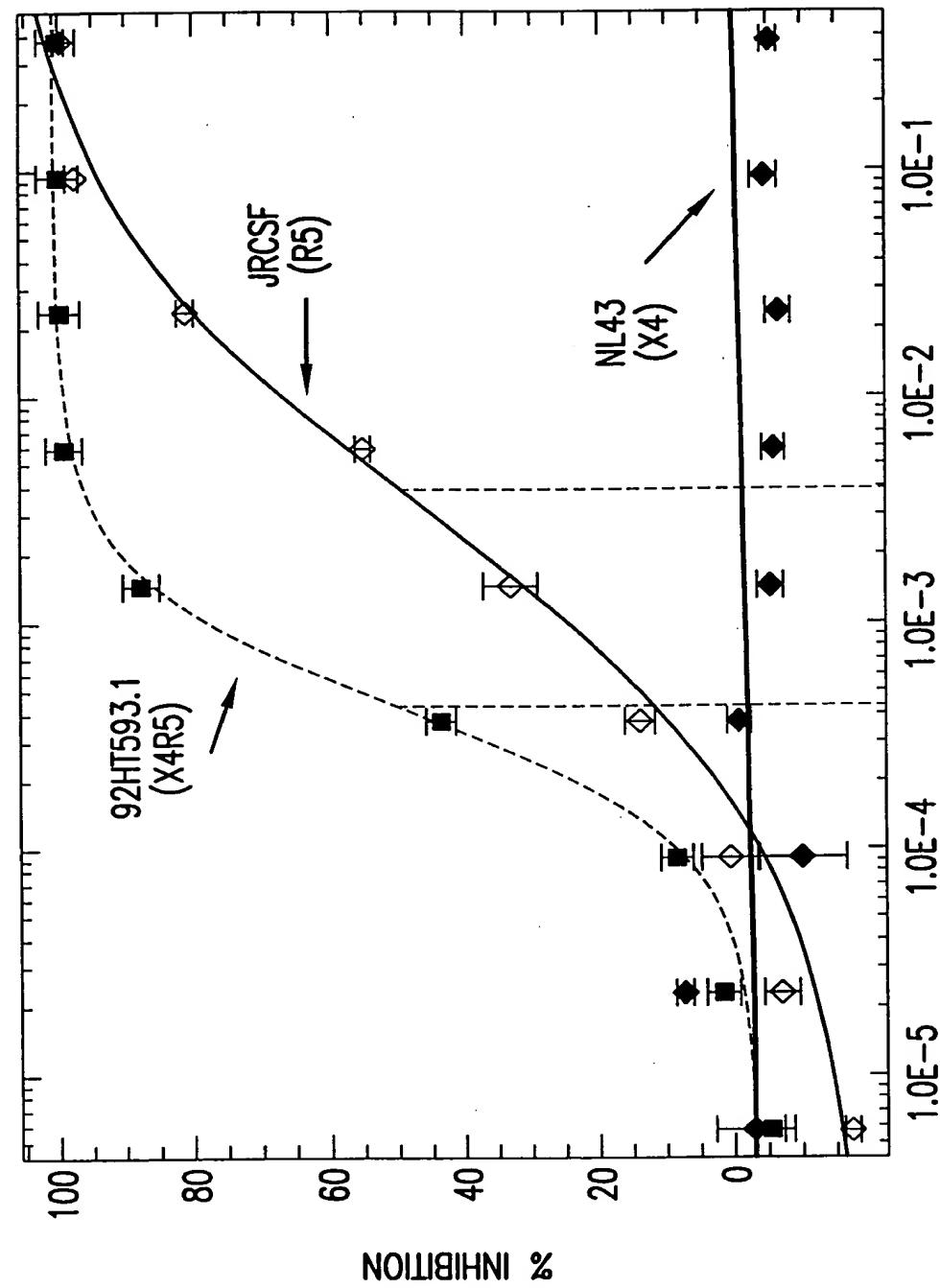


FIG. 4B

RECEIVED: JUL 28 2003  
6555  
C19 E

# ENTRY INHIBITOR SUSCEPTIBILITY: CCR5 INHIBITOR



DRUG: R5 INHIBITOR  
CELL: CD4/CCR5

FIG. 5A



# ENTRY INHIBITOR SUSCEPTIBILITY: CXCR4 INHIBITOR

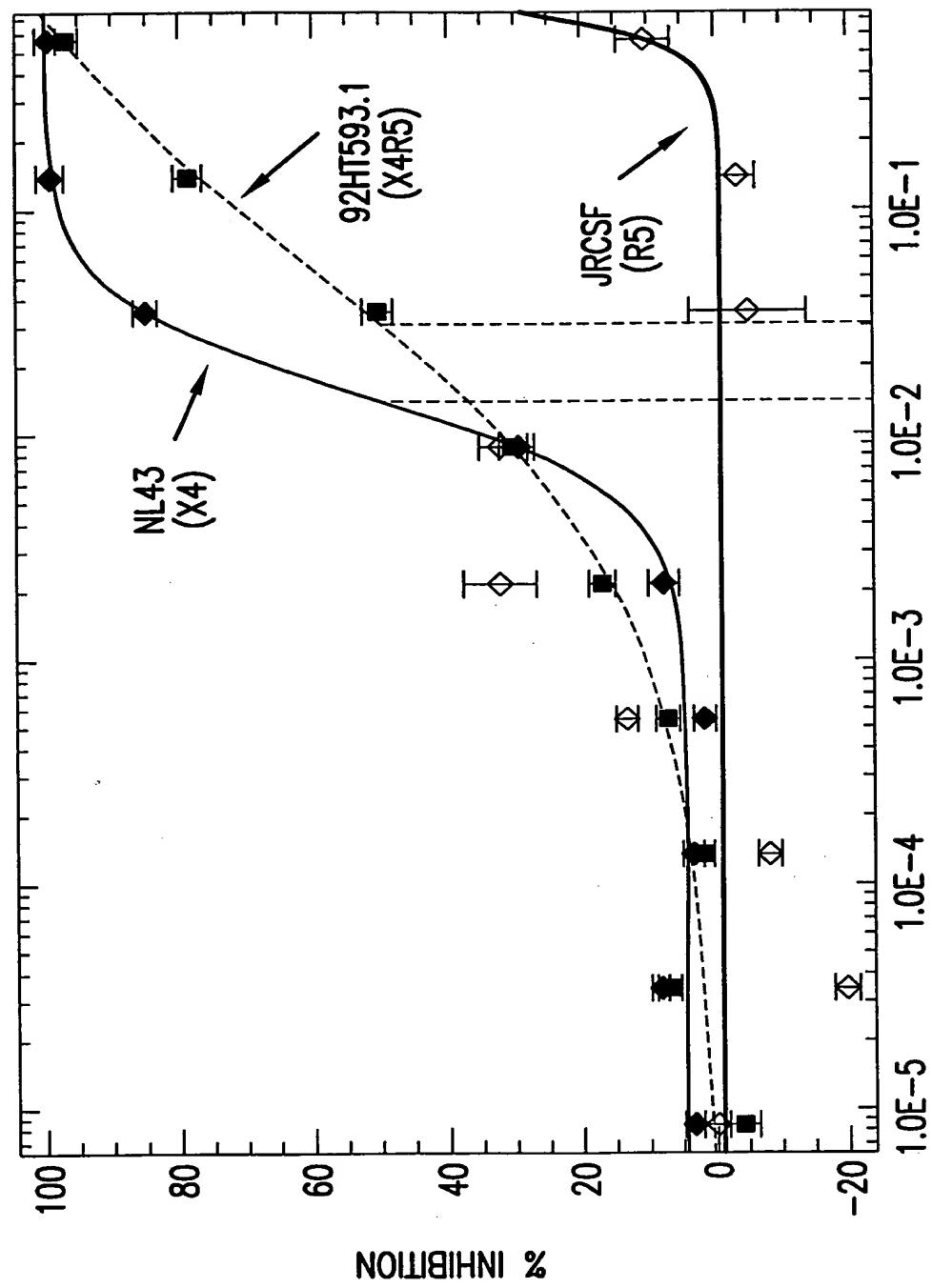
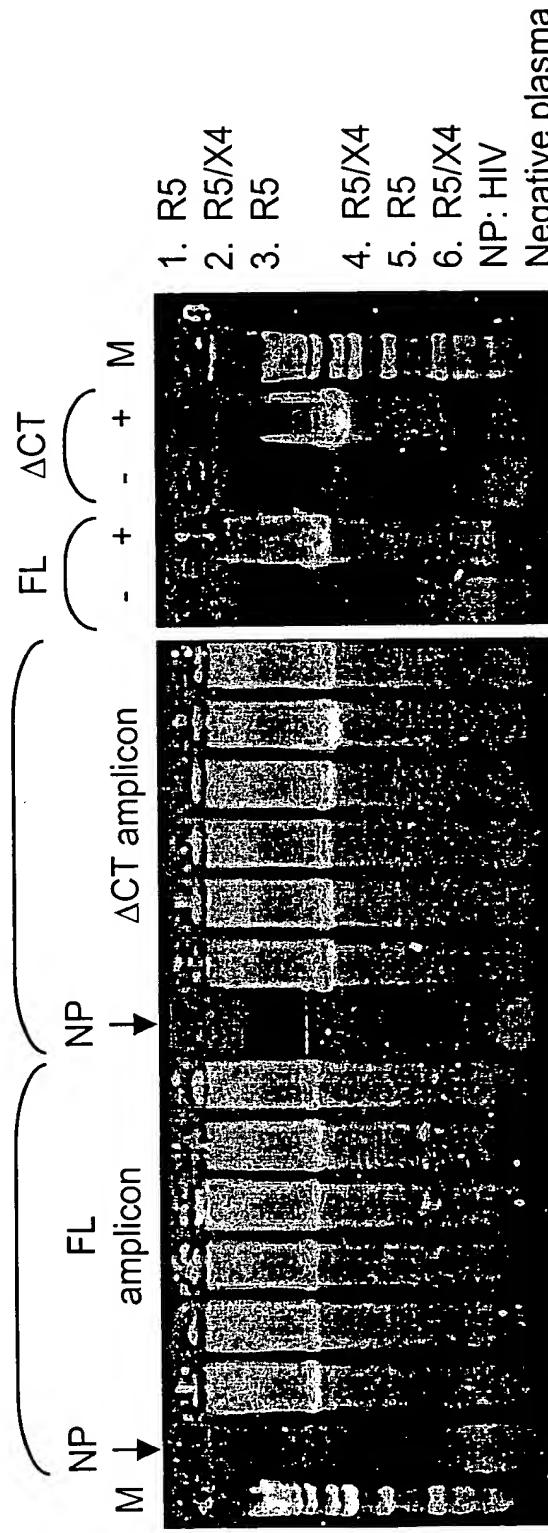


FIG. 5B

DRUG: X4 INHIBITOR  
CELL: CD4/CXCR4

## ENVELOPE SEQUENCE AMPLIFICATION



NP  
M

FL  
amplicon

ΔCT amplicon

- + - + M

1. R5

2. R5/X4

3. R5

4. R5/X4

5. R5

6. R5/X4

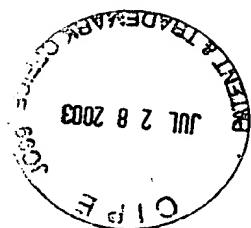
NP: HIV

Negative plasma

Co- <u>Receptor</u> Tropism	# of isolates					
	X4	R5	X4/R5	Undefined	35	
X4	15					
R5		24				
X4/R5			15			
Undefined				35		

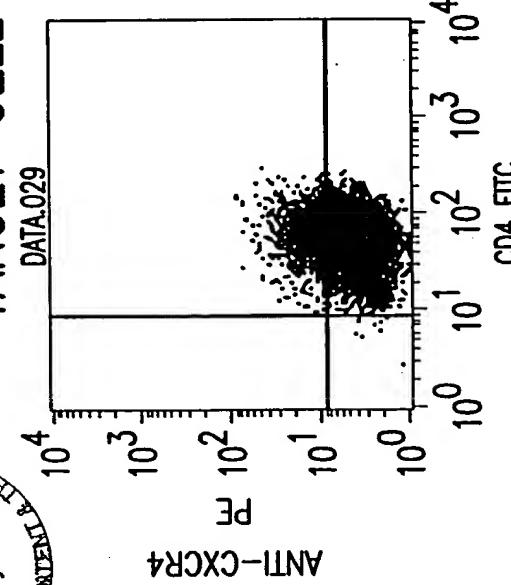
Envelope Subtype	# of isolate
Clade A	2
Clade B	76
Clade C	7
Clade D	1
Clade E	3

FIG. 6

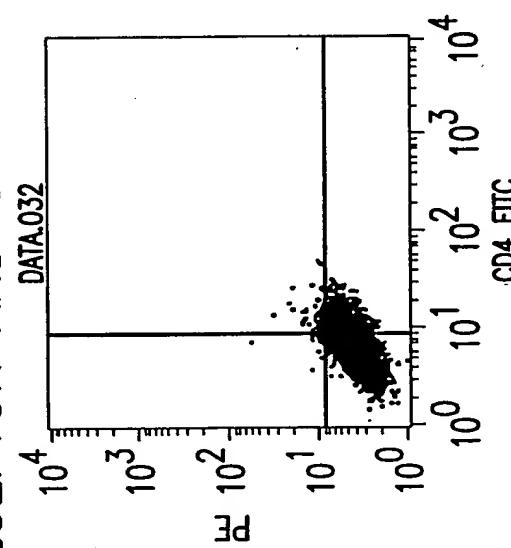


TARGET CELL RECEPTOR AND CO-RECEPTOR EXPRESSION

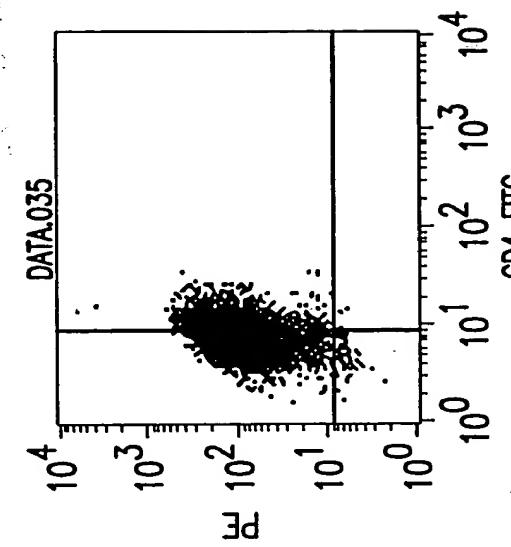
DATA.029



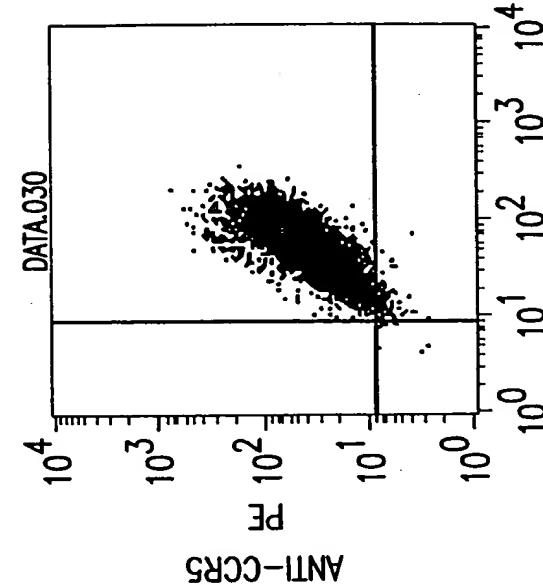
DATA.032



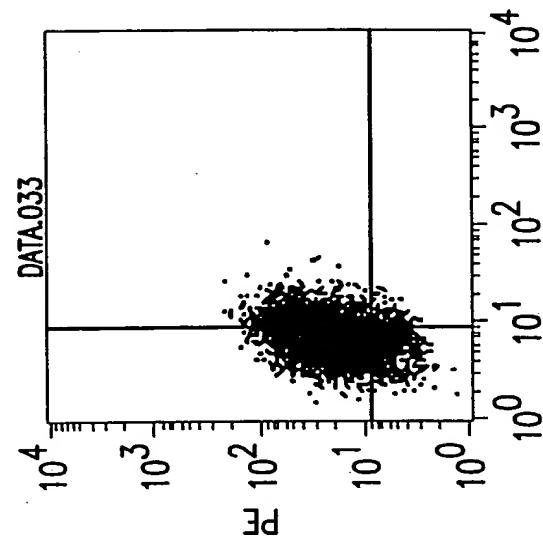
DATA.035



DATA.030



DATA.033



DATA.036

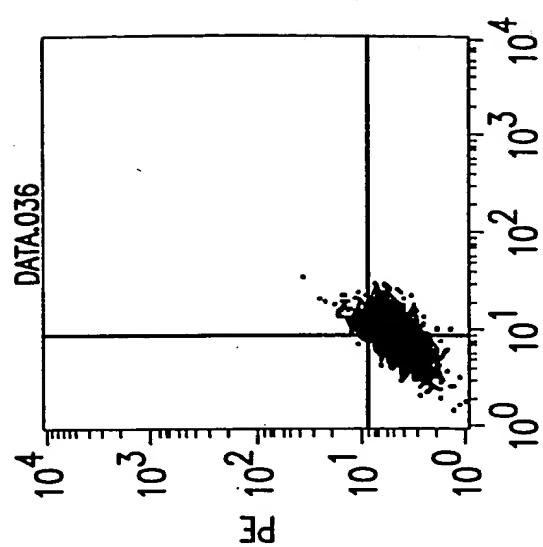
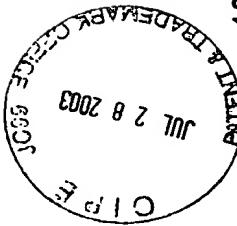


FIG.7 CXCR4+CCR5 CELLS  
CD4 CCR4 CELLS  
CD4 CXCR4 CELLS



## INHIBITION BY CO-RECEPTOR ANTAGONISTS

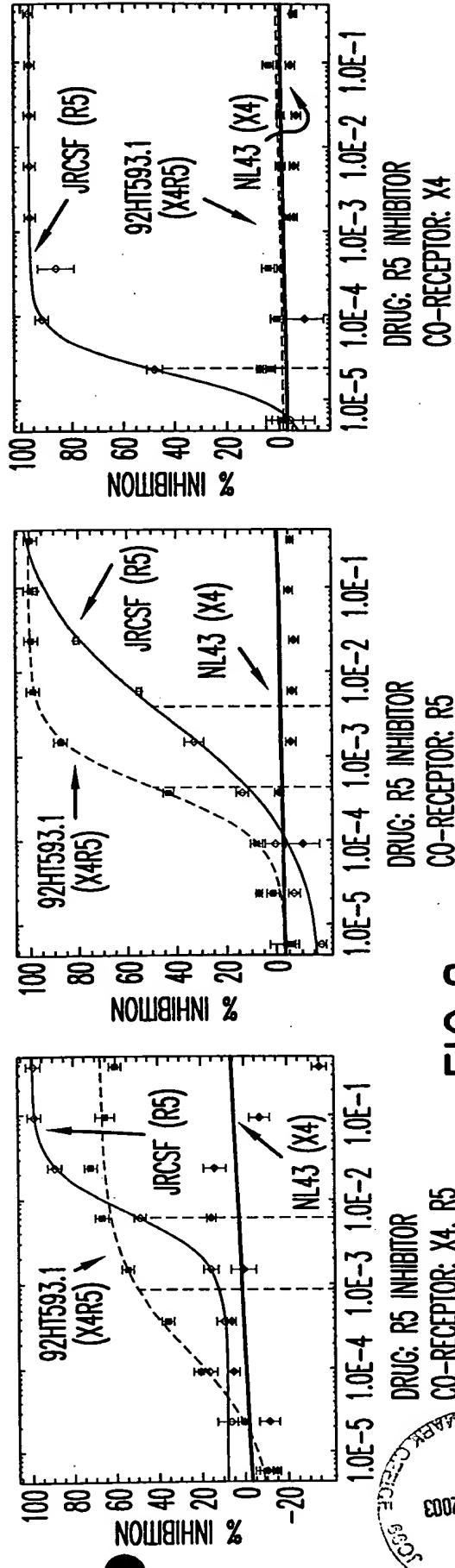
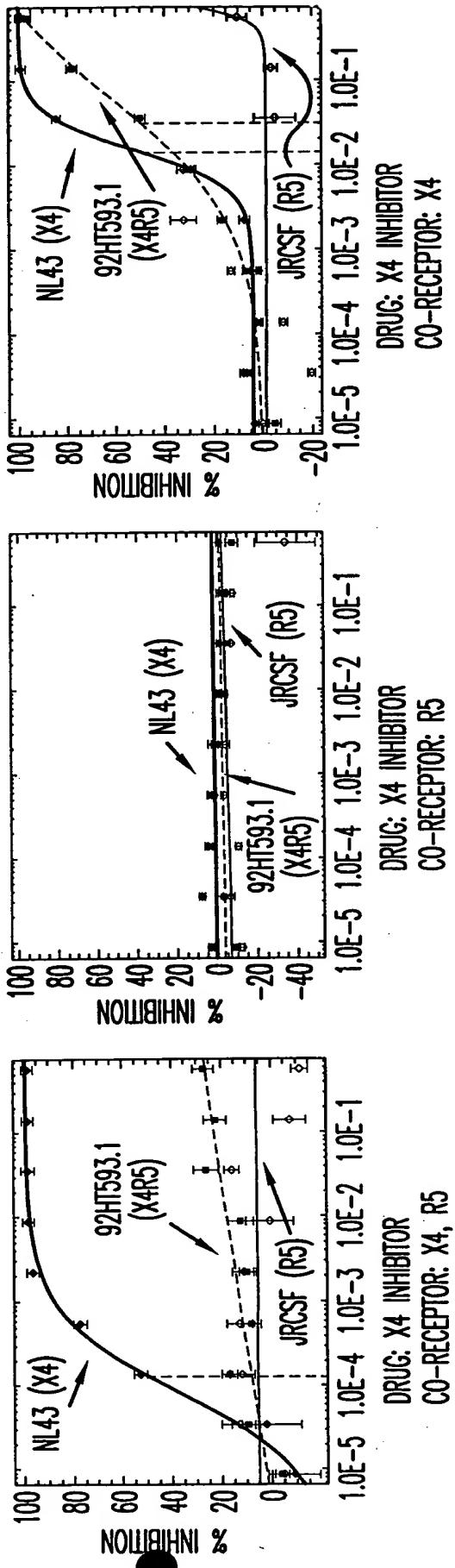


FIG. 8



## FUSION INHIBITOR PEPTIDES

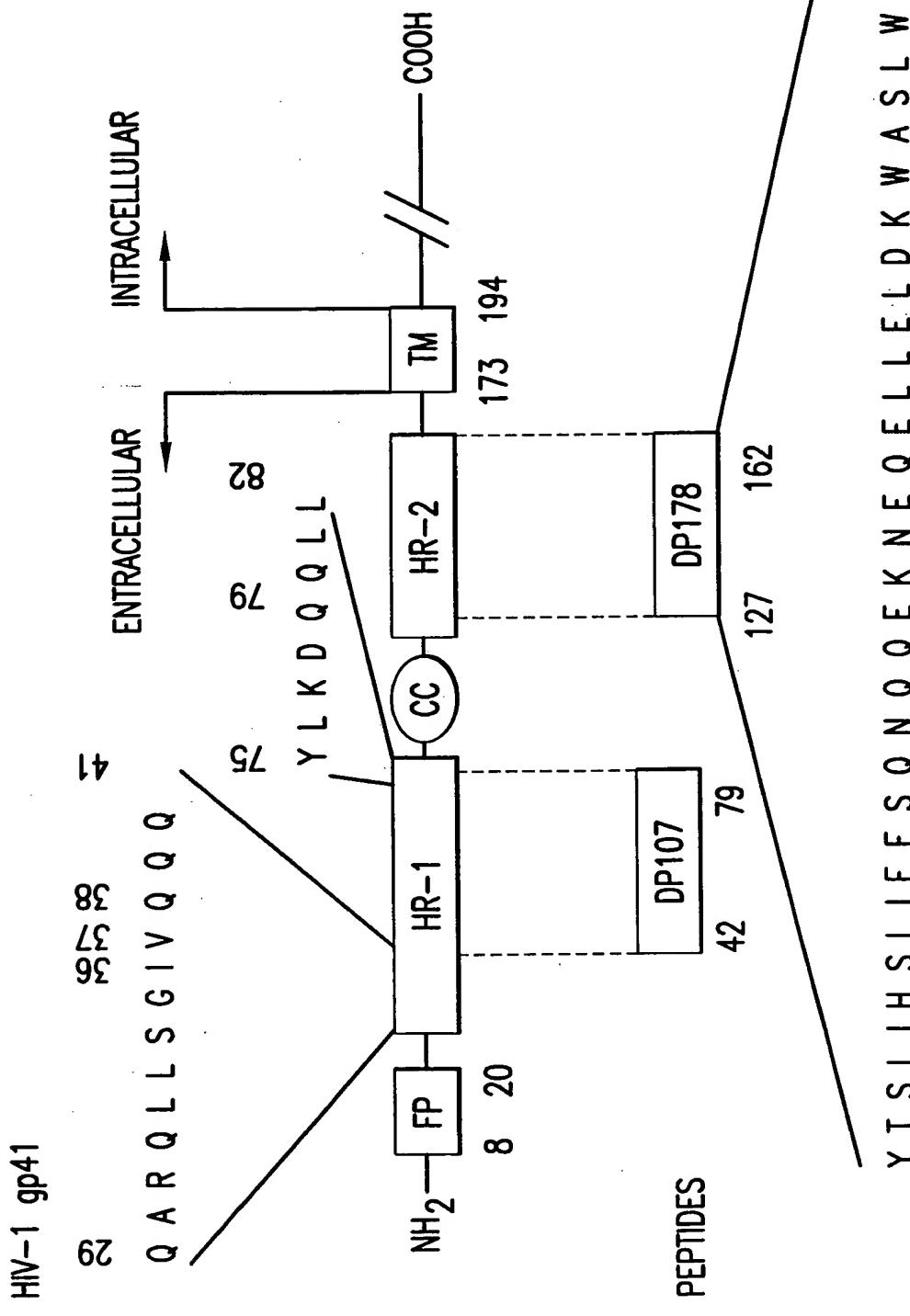


FIG.9

